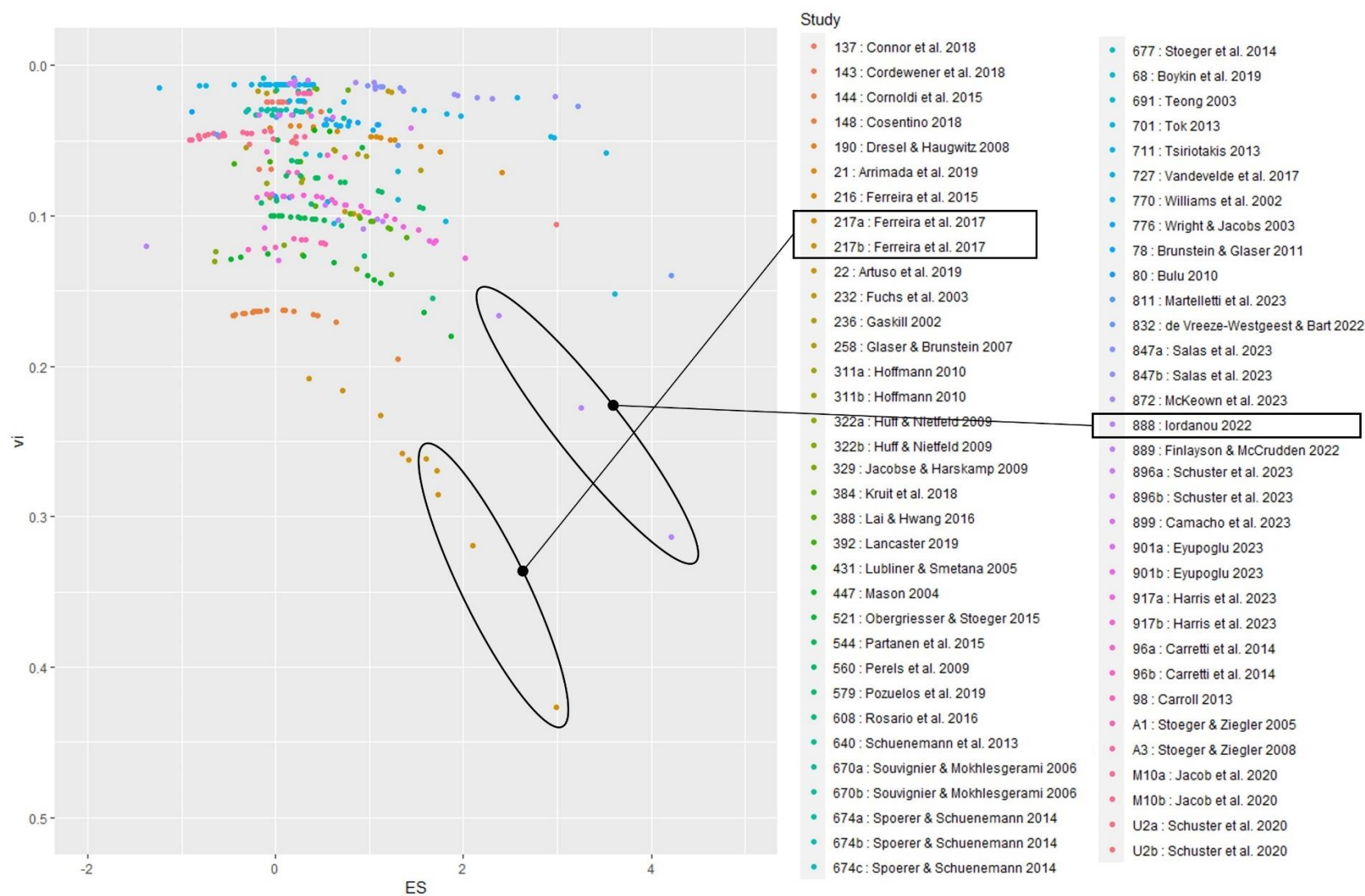


Table S1.*Keywords Included in Search*

	Concept A		Concept B		Concept C
▲ OR ▼	self-regulatory strategies; self-regulatory skills; metacognition; metacognitive skills; metacognitive strategies; self-regulated learning; self-monitoring; metacognitive monitoring	◀ AND ▶	transfer; training; intervention; scaffolding; strategy	◀ NOT ▶	Autism; Wellness; Wellbeing; Illness; Parents; Parental; Parent; Mother; Father; Health; Trauma; Disability; Disorder; Family; Deaf; Bullying; Cyberbullying; trichotillomania

Table S2

Annotated Funnel Plot.



Note. The three highlighted studies, or rather the absence of their mirrored counterparts, appears to be driving the asymmetry of the funnel plot.

Table S3*Effect of all Moderators on General Outcomes*

Moderators	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>
<i>Age</i>	58	324	<i>B</i> =0.0003 (0.04)	93.41 ^{***}	0.00
<u><i>Structural features of metacognition interventions</i></u>					
<i>Environment</i>					
Naturalistic	62	328	0.50 [0.36, 0.64]	93.56 ^{***}	0.91
Controlled	5	21	0.22 [-0.09, 0.53]	72.05 ^{***}	
<i>Mode of delivery</i>					
Teacher	31	157	0.56 [0.38, 0.75]	91.88 ^{***}	1.80
Researcher	21	136	0.38 [0.12, 0.63]	95.52 ^{***}	
Task materials	15	56	0.42 [0.13, 0.71]	83.99 ^{***}	
<i>Group size</i>					
Individual	18	78	0.37 [0.20, 0.55]	82.46 ^{***}	2.45
Small groups	18	144	0.38 [0.12, 0.64]	95.01 ^{***}	
Whole class	31	127	0.59 [0.38, 0.80]	93.01 ^{***}	
<i>Intensity</i>					
No. of sessions	61	318	<i>B</i> =0.005 (0.007)	93.67 ^{***}	0.43
Frequency	54	272	<i>B</i> =−0.063 (0.06)	93.95 ^{***}	1.25
Total duration	57	290	<i>B</i> =−0.003 (0.009)	93.27 ^{***}	0.14
<u><i>Content-related characteristics of metacognition interventions</i></u>					
<i>Intervention focus</i>					
Primary	29	140	0.42 [0.23, 0.61]	88.57 ^{***}	0.50
Secondary	38	209	0.53 [0.34, 0.71]	94.76 ^{***}	
<i>Content focus: Planning</i>					
Yes	52	298	0.51 [0.36, 0.67]	93.74 ^{***}	0.86
No	15	51	0.32 [0.10, 0.54]	87.20 ^{***}	
<i>Content focus: Monitoring</i>					
Yes	55	277	0.41 [0.27, 0.56]	92.82 ^{***}	4.23*
No	12	72	0.80 [0.50, 1.10]	93.51 ^{***}	
<i>Content focus: Control</i>					
Yes	25	147	0.44 [0.27, 0.60]	88.91 ^{***}	0.10
No	42	202	0.51 [0.32, 0.69]	94.45 ^{***}	
<i>Content focus: Reflection</i>					
Yes	46	257	0.55 [0.37, 0.72]	94.69 ^{***}	1.91
No	21	92	0.32 [0.17, 0.47]	80.47 ^{***}	

Note: ^A Most moderator variables were categorical, and for these the estimated *g* for each level is reported. Age, Number of sessions, Frequency of sessions and Total duration are all continuous moderators and as such *B* is reported. *k* is the number of effect sizes that entered the analysis; *I*² is a measure of heterogeneity; *Q* indicates whether the moderator significantly affected the effect size estimate. + *p* < .1, * *p* < .05, ** *p* < .01, *** *p* < .001.

Table S3 continued

Moderators	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>
<i>Content focus: Dosage</i>					
Number of foci	67	349	<i>B</i> =0.005 (0.08)	93.19***	0.01
<i>Instructional methods: Informed instruction</i>					
Yes	44	229	0.49 [0.32, 0.66]	93.09***	0.04
No	19	103	0.47 [0.21, 0.72]	93.79***	
<i>Instructional methods: Modelling</i>					
Yes	36	202	0.49 [0.30, 0.69]	94.02***	0.03
No	27	130	0.46 [0.27, 0.66]	92.04***	
<i>Instructional methods: Prompts</i>					
Yes	40	175	0.44 [0.27, 0.61]	91.72***	0.40
No	23	157	0.55 [0.31, 0.79]	94.61***	
<i>Instructional methods: Practice</i>					
Yes	56	299	0.51 [0.37, 0.66]	93.74***	1.38
No	7	33	0.28 [-0.05, 0.61]	78.32***	
<i>Instructional methods: Feedback</i>					
Yes	20	119	0.67 [0.40, 0.94]	96.04***	3.11 ⁺
No	43	213	0.40 [0.24, 0.55]	89.96***	
<i>Instructional methods: Peer activities</i>					
Yes	10	57	0.36 [-0.04, 0.75]	94.94***	1.08
No	53	275	0.51 [0.36, 0.66]	92.80***	
<i>Instructional methods: Dosage</i>					
Number of methods	63	332	<i>B</i> =0.028 (0.06)	93.31***	0.25
<u><i>Methodological features of studies</i></u>					
<i>Type of measure: SRL outcomes</i>					
Online	28	63	0.55 [0.30, 0.81]	95.27***	3.27 ⁺
Offline	31	112	0.26 [0.07, 0.44]	87.81***	
<i>Type of measure: Academic outcomes</i>					
Standardized test	20	37	0.12 [0.02, 0.22]	23.57	24.37***
Researcher-developed	39	115	0.88 [0.71, 1.05]	93.77***	
<i>Type of control group</i>					
Active	36	154	0.37 [0.20, 0.54]	89.20***	2.87 ⁺
Passive	31	195	0.60 [0.40, 0.80]	94.82***	
<i>Assignment to group</i>					
Random	48	247	0.50 [0.34, 0.67]	94.36***	0.72
Non-random	13	71	0.34 [0.06, 0.61]	87.38***	

Table S4

Effect of all Moderators on the SRL-related Outcomes Metacognition, Self-efficacy and Motivational orientations

Moderators	Metacognition					Self-efficacy					Motivational orientations				
	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>
<i>Age</i>	30	70	<i>B</i> =−0.03 (0.11)	97.03***	0.06	18	30	<i>B</i> =0.05 (0.05)	75.97***	0.88	14	29	<i>B</i> =0.11 (0.04)	81.62***	6.21*
<i>Structural features of metacognition interventions</i>															
<i>Mode of delivery</i>															
Teacher	17	25	0.91 [0.49, 1.33]	95.99***	16.49***	9	19	0.17 [-0.02, 0.37]	49.06***	0.25	10	16	0.11 [-0.10, 0.32]	63.26**	2.17
Researcher	11	39	-0.12 [-0.40, 0.16]	91.35***		6	7	0.12 [-0.30, 0.53]	89.90***		4	13	-0.15 [-0.51, 0.21]	91.55***	
Task materials	6	10	1.22 [0.50, 1.93]	86.58***		3	4	0.30 [-0.31, 0.92]	89.37**		0	0	-	-	
<i>Group size</i>															
Individual	10	16	0.74 [0.24, 1.25]	89.55***	0.51	6	7	0.08 [-0.11, 0.26]	47.65 ⁺	1.48	4	6	-0.001 [-0.33, 0.33]	73.36*	1.53
Small groups	7	30	0.32 [-0.41, 1.05]	97.90***		6	7	0.12 [-0.30, 0.53]	89.90***		7	16	-0.06 [-0.32, 0.20]	89.17***	
Whole class	17	28	0.72 [0.28, 1.15]	95.88***		6	16	0.38 [-0.03, 0.78]	73.91***		3	7	0.17 [-0.57, 0.92]	77.90**	
<i>Intensity</i>															
No. of sessions	28	60	<i>B</i> =0.01 (0.02)	97.30***	0.52	16	28	<i>B</i> =−0.006 (0.01)	76.14***	0.23	14	29	<i>B</i> =0.008 (0.02)	86.27***	0.21
Frequency	25	49	<i>B</i> =0.002 (0.13)	97.26***	0.00	10	22	<i>B</i> =0.004 (0.09)	83.26***	0.002	8	19	<i>B</i> =0.07 (0.08)	87.35***	0.76
Total duration	29	57	<i>B</i> =−0.02 (0.02)	96.57***	1.39	12	24	<i>B</i> =−0.01 (0.02)	81.39***	0.78	8	19	<i>B</i> =−0.08 (0.05)	86.47***	3.10 ⁺
<i>Content-related characteristics of metacognition interventions</i>															
<i>Focus</i>															
Primary	16	33	0.23 [-0.06, 0.53]	90.39***	5.84*	8	14	0.32 [-0.01, 0.66]	71.42***	1.72	6	13	-0.09 [-0.39, 0.20]	69.68**	1.51
Secondary	18	41	0.97 [0.48, 1.45]	97.58***		10	16	0.05 [-0.09, 0.19]	50.24***		8	16	0.18 [-0.10, 0.46]	89.65***	
<i>Content focus: Planning</i>															
Yes	26	63	0.72 [0.34, 1.11]	97.27***	1.08	18	30	-	-	-	14	29	-	-	-
No	8	11	0.27 [-0.18, 0.72]	86.37***		0	0	-	-		0	0	-	-	
<i>Content focus: Monitoring</i>															
Yes	27	65	0.41 [0.12, 0.70]	94.58***	7.30**	15	22	0.17 [-0.04, 0.38]	73.34***	0.03	14	29	-	-	-
No	7	9	1.45 [0.63, 2.27]	98.36***		3	8	0.26 [-0.33, 0.86]	89.30***		0	0	-	-	
<i>Content focus: Control</i>															
Yes	16	43	0.50 [0.21, 0.79]	93.24***	0.43	7	14	0.26 [-0.05, 0.57]	75.97***	0.47	5	13	0.10 [-0.19, 0.40]	91.18***	0.11
No	18	31	0.76 [0.22, 1.31]	97.93***		11	16	0.12 [-0.11, 0.37]	75.08***		9	16	-0.003 [-0.28, 0.27]	73.17***	
<i>Content focus: Reflection</i>															
Yes	24	63	0.63 [0.26, 1.01]	96.97***	0.004	13	25	0.27 [0.02, 0.51]	81.55***	1.90	10	25	0.08 [-0.18, 0.34]	88.32***	0.96
No	10	11	0.57 [0.03, 1.12]	92.51***		5	5	-0.03 [-0.22, 0.17]	0.00		4	4	-0.22 [-0.44, -0.002]	0.00	
<i>Content focus: Dosage</i>															
No. of foci	34	74	<i>B</i> =−0.14 (0.16)	96.50***	0.80	18	30	<i>B</i> =0.14 (0.12)	75.27***	1.29	14	29	<i>B</i> =0.14 (0.16)	85.68***	0.71

Table S4 continued

Moderators	Metacognition					Self-efficacy					Motivational orientations				
	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>
<i>Instructional methods: Informed instruction</i>															
Yes	22	59	0.34 [0.05, 0.62]	94.46***	6.55*	15	26	-	-	-	10	25	-	-	-
No	8	8	1.22 [0.42, 2.03]	97.00***		2	3	-	-		3	3	-	-	
<i>Instructional methods: Modelling</i>															
Yes	16	46	0.76 [0.23, 1.28]	97.57***	1.23	10	21	0.11 [-0.11, 0.33]	70.17***	0.98	8	16	-0.06 [-0.31, 0.19]	87.87***	1.72
No	14	21	0.36 [0.07, 0.64]	89.74***		7	8	0.34 [-0.04, 0.72]	85.66***		5	12	0.21 [-0.21, 0.62]	82.92***	
<i>Instructional methods: Prompts</i>															
Yes	17	34	0.38 [0.06, 0.71]	90.58***	1.70	10	11	0.24 [-0.05, 0.54]	84.90***	0.28	8	15	0.06 [-0.22, 0.34]	78.13***	0.36
No	13	33	0.85 [0.24, 1.46]	98.33***		7	18	0.09 [-0.10, 0.28]	49.45***		5	13	-0.02 [-0.33, 0.28]	90.22***	
<i>Instructional methods: Practice</i>															
Yes	27	60	0.66 [0.34, 0.99]	96.43***	3.19+	15	27	-	-	-	12	25	-	-	-
No	3	7	-0.20 [-0.90, 0.51]	87.29***		2	2	-	-		1	3	-	-	
<i>Instructional methods: Feedback</i>															
Yes	7	26	1.20 [0.28, 2.13]	98.71***	4.26*	7	12	0.28 [-0.10, 0.66]	88.38***	0.41	4	9	0.11 [-0.27, 0.48]	93.66***	0.09
No	23	41	0.38 [0.09, 0.66]	92.31***		10	17	0.11 [-0.09, 0.32]	59.59***		9	19	-0.01 [-0.29, 0.27]	77.80***	
<i>Instructional methods: Peer activities</i>															
Yes	3	9	-0.09 [-0.95, 0.77]	91.75***	2.18	3	3	-	-	-	5	10	0.17 [-0.21, 0.56]	78.72***	0.97
No	27	58	0.65 [0.33, 0.98]	96.53***		14	26	-	-		8	18	-0.03 [-0.28, 0.23]	88.59***	
<i>Instructional methods: Dosage</i>															
No. of methods	30	67	<i>B</i> =−0.14 (0.17)	96.42***	0.68	17	29	<i>B</i> =0.13 (0.13)	77.06***	1.09	13	28	<i>B</i> =0.14 (0.18)	86.64***	0.58
<i>Methodological features of studies</i>															
<i>Outcome type: SRL outcomes</i>															
Online	16	38	0.89 [0.42, 1.35]	96.79***	0.45	1	1	-	-	-	1	2	-	-	-
Offline	19	36	0.36 [0.01, 0.70]	94.75***		18	29	-	-		14	27	-	-	
<i>Type of control group</i>															
Active	13	27	0.31 [-0.08, 0.70]	89.90***	2.46	9	10	0.31 [-0.07, 0.69]	89.03***	1.29	7	14	0.04 [-0.30, 0.38]	77.97***	0.002
Passive	21	47	0.82 [0.39, 1.24]	97.61***		9	20	0.06 [-0.09, 0.21]	39.78**		7	15	0.07 [-0.19, 0.33]	89.57***	
<i>Assignment to group</i>															
Random	25	61	0.72 [0.33, 1.10]	97.23***	1.38	9	14	0.07 [-0.08, 0.21]	45.69**	0.28	9	20	0.02 [-0.21, 0.24]	87.74***	1.18
Non-random	6	9	0.23 [-0.45, 0.91]	92.21***		6	13	0.17 [-0.21, 0.55]	77.10***		4	5	-0.25 [-0.47, -0.03]	0.00***	

Note: ^A Most moderator variables were categorical, and for these the estimated *g* for each level is reported. Age, Number of sessions, Frequency of sessions and Total duration are all continuous moderators and as such *B* is reported. *k* is the number of effect sizes that entered the analysis; *I*² is a measure of heterogeneity; *Q* indicates whether the moderator significantly affected the effect size estimate. Missing values are cases where too few studies were present for the moderator analysis (minimum of 4 for each level of a categorical moderator, minimum of 10 for a continuous moderator variable). For outcome constructs where outliers were identified in the analyses conducted to address RQ1 (namely, Metacognition, Self-efficacy, Motivational orientations and Language), these moderator analyses were conducted using the outlier-corrected datasets. + *p* < .1, * *p* < .05, ** *p* < .01, *** *p* < .001.

Table S5*Effect of all Moderators on the SRL-related Outcomes Learning Strategies and Executive Functions*

Moderators	Learning strategies					Executive functions				
	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (SE) ^A	<i>I</i> ²	<i>Q</i>
<i>Age</i>	9	24	<i>B</i> =−0.43 (0.21)	83.89***	4.06*	6	13	<i>B</i> =0.08 (0.08)	76.39***	0.92
<u><i>Structural features of metacognition interventions</i></u>										
<i>Mode of delivery</i>										
Teacher	6	14	0.36 [−0.001, 0.72]	76.22***	6.59*	2	2	-	-	-
Researcher	2	5	−0.06 [−0.47, 0.35]	93.12***		2	2	-	-	
Task materials	1	5	0.91 [0.29, 1.53]	52.58***		5	13	-	-	
<i>Group size</i>										
Individual	2	2	-	-	4.28*	5	13	-	-	-
Small groups	2	5	−0.06 [−0.47, 0.35]	93.12***		2	2	-	-	
Whole class	5	17	0.52 [0.14, 0.90]	73.32***		2	2	-	-	
<i>Intensity</i>										
No. of sessions	8	19	<i>B</i> =0.02 (0.01)	86.76***	1.55	9	17	<i>B</i> =0.003 (0.02)	76.24***	0.02
Frequency	8	19	<i>B</i> =0.14 (0.08)	86.14***	2.66	7	15	<i>B</i> =−0.03 (0.13)	77.62***	0.07
Total duration	9	24	<i>B</i> =−0.12 (0.05)	83.25***	5.22*	7	15	<i>B</i> =0.006 (0.06)	77.85***	0.01
<u><i>Content-related characteristics of metacognition interventions</i></u>										
<i>Focus</i>										
Primary	5	16	0.53 [0.12, 0.95]	70.78***	3.19 ⁺	5	7	0.25 [−0.03, 0.53]	38.52 ⁺	0.04
Secondary	4	8	0.08 [−0.23, 0.39]	90.56***		4	10	0.30 [−0.11, 0.72]	83.31***	
<i>Content focus: Planning</i>										
Yes	9	24	-	-	-	5	9	0.17 [−0.24, 0.58]	84.68***	0.86
No	0	0	-	-		4	8	0.47 [0.12, 0.83]	44.86	
<i>Content focus: Monitoring</i>										
Yes	8	19	0.18 [−.10, 0.47]	87.17***	4.03*	8	15	-	-	-
No	1	5	0.91 [0.29, 1.53]	-		1	2	-	-	
<i>Content focus: Control</i>										
Yes	5	15	0.07 [−0.27, 0.41]	87.97***	4.47*	5	11	0.41 [0.11, 0.71]	39.56 ⁺	0.53
No	4	9	0.58 [0.17, 1.00]	72.11***		4	6	0.17 [−0.38, 0.72]	90.95***	
<i>Content focus: Reflection</i>										
Yes	9	24	-	-	-	2	2	-	-	-
No	0	0	-	-		7	15	-	-	
<i>Content focus: Dosage</i>										
No. of foci	9	24	<i>B</i> =−0.41 (0.17)	83.17***	5.77*	9	17	<i>B</i> =−0.29 (0.23)	74.72***	1.66

Table S5 continued

Moderators	Learning strategies					Executive functions				
	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>
<i>Instructional methods: Informed instruction</i>										
Yes	9	24	-	-	-	5	6	0.37 [0.04, 0.70]	54.86 ⁺	0.67
No	0	0	-	-		2	7	0.14 [-0.25, 0.53]	25.43 ⁺	
<i>Instructional methods: Modelling</i>										
Yes	5	15	0.09 [-0.26, 0.45]	89.69 ^{***}	3.76 ⁺	1	1	-	-	-
No	4	9	0.56 [0.22, 0.90]	55.18 ^{***}		6	12	-	-	
<i>Instructional methods: Prompts</i>										
Yes	5	6	0.43 [0.15, 0.71]	66.32 [*]	0.70	3	8	0.16 [-0.16, 0.47]	23.34	1.23
No	4	18	0.22 [-0.27, 0.72]	89.17 ^{***}		4	5	0.43 [0.01, 0.85]	61.94 ⁺	
<i>Instructional methods: Practice</i>										
Yes	9	24	-	-	-	5	9	0.37 [0.02, 0.71]	54.12 ⁺	0.40
No	0	0	-	-		2	4	0.18 [-0.24, 0.59]	29.62	
<i>Instructional methods: Feedback</i>										
Yes	4	11	0.40 [-0.16, 0.96]	93.17 ^{***}	0.07	0	0	-	-	-
No	5	13	0.28 [-0.11, 0.66]	74.95 ^{***}		7	13	-	-	
<i>Instructional methods: Peer activities</i>										
Yes	2	3	-	-	-	1	1	-	-	-
No	7	21	-	-		6	12	-	-	
<i>Instructional methods: Dosage</i>										
No. of methods	9	24	<i>B</i> =-0.07 (0.21)	87.20 ^{***}	0.12	7	13	<i>B</i> =-0.12 (0.15)	40.62 ⁺	0.67
<i>Methodological features of studies</i>										
<i>Outcome type: SRL outcomes</i>										
Online	2	4	-0.11 [-0.61, 0.39]	94.36 ^{***}	4.03 [*]	9	17	-	-	-
Offline	8	20	0.44 [0.16, 0.73]	75.38 ^{***}		0	0	-	-	
<i>Type of control group</i>										
Active	4	9	0.41 [0.02, 0.80]	77.17 ^{***}	1.45	7	13	0.30 [0.06, 0.55]	38.02 [*]	0.08
Passive	5	15	0.15 [-0.22, 0.52]	87.76 ^{***}		2	4	0.23 [-0.61, 1.07]	94.57 ^{***}	
<i>Assignment to group</i>										
Random	5	8	0.07 [-0.22, 0.36]	90.24 ^{***}	0.01	8	15	-	-	-
Non-random	1	8	0.05 [-0.74, 0.84]	64.60 ^{***}		0	0	-	-	

Note: ^A Most moderator variables were categorical, and for these the estimated *g* for each level is reported. Age, Number of sessions, Frequency of sessions and Total duration are all continuous moderators and as such *B* is reported. *k* is the number of effect sizes that entered the analysis; *I*² is a measure of heterogeneity; *Q* indicates whether the moderator significantly affected the effect size estimate. Missing values are cases where too few studies were present for the moderator analysis (minimum of 4 for each level of a categorical moderator, minimum of 10 for a continuous moderator variable). For outcome constructs where outliers were identified in the analyses conducted to address RQ1 (namely, Metacognition, Self-efficacy, Motivational orientations and Language), these moderator analyses were conducted using the outlier-corrected datasets. + *p* < .1, * *p* < .05, ** *p* < .01, *** *p* < .001.

Table S6

Effect of all Moderators on the Academic Outcomes Language, Mathematics and Other Academic Subjects

Moderators	Language					Mathematics					Other academic subjects				
	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>
<i>Age</i>	33	123	<i>B</i> =−0.02 (0.06)	94.27***	0.15	10	12	<i>B</i> =−0.07 (0.11)	82.65***	0.39	13	10	<i>B</i> =−0.38 (0.23)	90.62***	2.78
<i>Structural features of metacognition interventions</i>															
<i>Mode of delivery</i>															
Teacher	21	70	0.60 [0.36, 0.84]	93.56***	0.91	5	7	0.83 [0.43, 1.24]	89.74***	1.82	2	3	-	-	0.00
Researcher	14	57	0.70 [0.36, 1.03]	95.04***		0	0	-	-		5	7	0.63 [-0.17, 1.43]	96.26***	
Task materials	3	6	0.23 [-0.25, 0.71]	63.49 ⁺		6	6	0.43 [0.12, 0.75]	56.80*		5	7	0.49 [-0.59, 1.57]	91.45***	
<i>Group size</i>															
Individual	8	15	0.24 [0.04, 0.43]	52.87***	4.50	7	9	-	-	-	2	4	1.67 [0.55, 2.78]	68.93**	3.27 ⁺
Small groups	13	76	0.61 [0.31, 0.91]	93.75***		1	1	-	-		2	2	-	-	
Whole class	17	42	0.84 [0.58, 1.10]	95.27***		3	3	-	-		8	11	0.50 [-0.11, 1.10]	95.45***	
<i>Intensity</i>															
No. of sessions	36	130	<i>B</i> =−0.007 (0.01)	94.18***	0.73	9	11	<i>B</i> =0.02 (0.01)	81.83***	3.36 ⁺	9	12	<i>B</i> =−0.01 (0.03)	95.53***	0.20
Frequency	33	116	<i>B</i> =−0.15 (0.09)	94.51***	2.60	8	10	<i>B</i> =0.03 (0.13)	89.56***	0.04	9	12	<i>B</i> =−0.37 (0.21)	94.22***	3.16 ⁺
Total duration	35	119	<i>B</i> =−0.005 (0.02)	94.55***	0.10	11	13	<i>B</i> =−0.004 (0.02)	85.77***	0.05	8	9	-	-	-
<i>Content-related characteristics of metacognition interventions</i>															
<i>Focus</i>															
Primary	13	31	0.63 [0.27, 0.98]	92.46***	0.21	7	9	0.84 [0.50, 1.18]	85.38***	4.12*	6	8	0.51 [-0.21, 1.23]	93.50***	0.45
Secondary	25	102	0.63 [0.40, 0.85]	94.24***		4	4	0.23 [0.003, 0.46]	10.26		6	9	0.74 [-0.08, 1.56]	95.26***	
<i>Content focus: Planning</i>															
Yes	28	108	0.70 [0.51, 0.90]	93.71***	2.91 ⁺	9	11	-	-	-	8	13	0.88 [0.24, 1.51]	95.15***	1.56
No	10	25	0.33 [-0.06, 0.72]	93.87***		2	2	-	-		4	4	0.11 [-0.14, 0.37]	6.47	
<i>Content focus: Monitoring</i>															
Yes	29	86	0.52 [0.29, 0.75]	94.67***	3.46 ⁺	10	12	-	-	-	12	17	-	-	-
No	9	47	0.90 [0.66, 1.15]	90.92***		1	1	-	-		0	0	-	-	
<i>Content focus: Control</i>															
Yes	16	31	0.38 [0.20, 0.55]	73.23***	3.64 ⁺	4	4	0.34 [0.15, 0.54]	0.00	2.16	4	7	1.20 [0.61, 1.79]	80.31***	3.72 ⁺
No	22	102	0.75 [0.51, 1.00]	95.28***		7	9	0.81 [0.43, 1.18]	87.64***		8	10	0.29 [-0.29, 0.98]	95.45***	
<i>Content focus: Reflection</i>															
Yes	25	88	0.82 [0.59, 1.04]	95.49***	5.43*	7	9	0.72 [0.43, 1.00]	78.76***	0.26	9	14	-	-	-
No	13	45	0.34 [0.14, 0.53]	78.38***		4	4	0.59 [-0.18, 1.36]	90.64***		3	3	-	-	
<i>Content focus: Dosage</i>															
No. of foci	38	133	<i>B</i> =−0.02 (0.11)	94.07***	0.04	11	13	<i>B</i> =−0.28 (0.18)	83.42***	2.41	12	17	<i>B</i> =0.41 (0.22)	93.22***	3.55 ⁺

Table S6 continued

Moderators	Language					Mathematics					Other academic subjects				
	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>	<i>n</i> <i>studies</i>	<i>k</i>	<i>g</i> [95% CI] or <i>B</i> (<i>SE</i>) ^A	<i>I</i> ²	<i>Q</i>
<i>Instructional methods: Informed instruction</i>															
Yes	23	64	0.70 [0.46, 0.93]	93.41***	0.27	7	7	0.74 [0.36, 1.13]	72.69**	0.05	7	12	0.93 [0.28, 1.57]	92.36***	1.81
No	14	67	0.55 [0.24, 0.86]	94.77***		3	5	0.67 [0.18, 1.16]	89.99***		4	4	0.14 [-0.62, 0.89]	94.77***	
<i>Instructional methods: Modelling</i>															
Yes	26	91	0.69 [0.50, 0.88]	91.92***	1.05	1	1	-	-	-	6	9	0.61 [-0.27, 1.49]	92.69***	0.04
No	11	40	0.48 [0.01, 0.95]	96.64***		9	11	-	-		5	7	0.63 [-0.17, 1.43]	96.26***	
<i>Instructional methods: Prompts</i>															
Yes	22	71	0.51 [0.26, 0.76]	94.55***	1.41	8	10	-	-	-	7	10	0.65 [-0.08, 1.37]	94.38***	0.10
No	15	60	0.82 [0.57, 1.07]	92.95***		2	2	-	-		4	6	0.59 [-0.38, 1.56]	95.06***	
<i>Instructional methods: Practice</i>															
Yes	35	126	0.65 [0.46, 0.84]	94.38***	1.13	7	9	-	-	-	10	15	-	-	-
No	2	5	0.09 [-0.29, 0.46]	0.00		3	3	-	-		1	1	-	-	
<i>Instructional methods: Feedback</i>															
Yes	12	51	0.89 [0.59, 1.19]	95.79***	4.58*	1	1	-	-	-	4	6	0.85 [-0.22, 1.92]	84.86***	0.51
No	25	80	0.48 [0.27, 0.69]	91.47***		9	11	-	-		7	10	0.57 [-0.09, 1.23]	96.26***	
<i>Instructional methods: Peer activities</i>															
Yes	8	28	0.67 [0.08, 1.26]	97.37***	0.03	1	1	-	-	-	1	1	-	-	-
No	29	103	0.61 [0.42, 0.81]	91.86***		9	11	-	-		10	15	-	-	
<i>Instructional methods: Dosage</i>															
No. of methods	37	131	<i>B</i> =−0.03 (0.11)	94.18***	0.05	10	12	<i>B</i> =−0.01 (0.16)	83.56***	0.01	11	16	<i>B</i> =0.17 (0.20)	94.51***	0.74
<i>Methodological features of studies</i>															
<i>Outcome type: Academic outcomes</i>															
Standardized	19	34	0.13 [0.03, 0.24]	25.66	22.58***	2	2	-	-	-	1	1	-	-	-
Researcher	24	93	0.93 [0.73, 1.13]	94.70***		8	10	-	-		9	12	-	-	
<i>Type of control group</i>															
Active	22	56	0.52 [0.29, 0.76]	91.57***	2.58	6	8	0.72 [0.40, 1.04]	80.97***	0.19	7	10	0.48 [-0.19, 1.16]	94.78***	1.11
Passive	16	77	0.76 [0.48, 1.04]	94.88***		5	5	0.60 [0.02, 1.18]	88.06***		5	7	0.91 [0.22, 1.59]	90.43***	
<i>Assignment to group</i>															
Random	27	98	0.71 [0.50, 0.92]	94.05***	3.19 ⁺	6	6	-	-	-	9	13	-	-	-
Non-random	10	30	0.31 [0.09, 0.52]	73.48***		1	3	-	-		2	3	-	-	

Note: ^A Most moderator variables were categorical, and for these the estimated *g* for each level is reported. Age, Number of sessions, Frequency of sessions and Total duration are all continuous moderators and as such *B* is reported. *k* is the number of effect sizes that entered the analysis; *I*² is a measure of heterogeneity; *Q* indicates whether the moderator significantly affected the effect size estimate. Missing values are cases where too few studies were present for the moderator analysis (minimum of 4 for each level of a categorical moderator, minimum of 10 for a continuous moderator variable). For outcome constructs where outliers were identified in the analyses conducted to address RQ1 (namely, Metacognition, Self-efficacy, Motivational orientations and Language), these moderator analyses were conducted using the outlier-corrected datasets. + *p* < .1, * *p* < .05, ** *p* < .01, *** *p* < .001.